AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A J-laying pipe-laying vessel comprising

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being laid in a J-laying process by the vessel;

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement; and

means for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement.

2. (Original) A vessel according to claim 1, in which the guide rollers of at least one set of rollers include rollers whose axes of rotation, in a plane perpendicular to the tower, are inclined to one another.

3. (Previously Presented) A vessel according to claim 1, in which the guide rollers of at least one set of rollers extend at least one quarter of a revolution around the path of the pipeline.

4. (Original) A vessel according to claim 3, in which the guide rollers of at least one set of rollers extend substantially all around the path of the pipeline.

5. (Previously Presented) A vessel according to claim 1, in which the lower guide arrangement is of substantially trumpet shape flaring outwardly in the direction of travel of the pipeline during laying, and the angle of flare increasing in the direction of travel of the pipeline during laying.

6. (Previously Presented) A vessel according to claim 1, in which the guide rollers are freely rotatable.

7. (Previously Presented) A vessel according to claim 1, in which at least some of the rollers are mounted for rotation in bearings that are directly or indirectly resiliently displaceable.

8. (Original) A vessel according to claim 7, in which the resistance of the bearings to resilient displacement is more than 100kN/m.

9. (Original) A vessel according to claim 8, in which the resistance of the bearings to resilient displacement is more than 500kN/m.

10. (Previously Presented) A vessel according to claim 7, in which the bearings are resiliently displaceable by a distance of more than 50 mm.

11. (Original) A vessel according to claim 10, in which at least some of the bearings are resiliently displaceable by a distance of more than 100 mm.

12. (Previously Presented) A vessel according to claim 1, in which the inclination of the tower assembly is adjustable and the lower guide arrangement is secured to the tower assembly.

13. (Previously Presented) A vessel according to claim 1, in which the inclination of the tower assembly is fixed.

14. (Previously Presented) A vessel according to claim 1, in which the inclination of the tower assembly is in the range of 45° to 90° to the horizontal.

15. (Previously Presented) A vessel according to claim 1, in which three or more sets of guide rollers are positioned along the path of the pipeline below sea level.

16. (Original) A vessel according to claim 15, in which five or more sets of guide rollers are positioned along the path of the pipeline below sea level.

17. (Previously Presented) A vessel according to claim 15, in which the sets of rollers are spaced apart substantially evenly along the path of the pipeline.

18. (Previously Presented) A vessel according to claim 1, in which the spacing along the path of the pipeline between adjacent sets of guide rollers is in the range of 2 m to 15 m.

Claims 19, 20 and 21 (Canceled).

22. (Currently Amended) A method of J-laying laying a pipeline from a vessel, comprising:

lowering the pipeline down an upwardly extending tower assembly of the vessel and then through a lower guide arrangement, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the pipeline, the pipeline undergoing some bending to a shallower angle of inclination as it passes through the lower guide arrangement; and

monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement.

23. (Previously Presented) A method according to claim 22, employing a pipe-laying comprising

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being laid by the vessel; and

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path,

the guide rollers being located such that they allow some bending of the pipeline as it passes through the lower guide arrangement.

24. (Previously Presented) A method according to claim 22, further comprising monitoring forces exerted on the pipeline by one or more of the guide rollers and adjusting the operation of the vessel in dependence upon the monitoring.

25. (Previously Presented) A method according to claim 23, further comprising monitoring forces exerted on the pipeline by one or more of the guide rollers and adjusting the operation of the vessel in dependence upon the monitoring.

26. (Previously Presented) A vessel according to claim 1, in which the force monitoring means comprise load cells.

27. (Previously Presented) A vessel according to claim 1, further including a control station for receiving signals from the force monitoring means.

28. (Previously Presented) A vessel according to claim 27, in which the control station provides signals for the operation of piston and cylinder arrangements for operating the guide rollers.

29. (Previously Presented) A vessel according to claim 28, in which the signals provided by the control station are passed to a hydraulic supply and control valve station.

30. (Currently Amended) A pipe-laying vessel for J-laying a pipe, the vessel comprising:

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as pipeline is being J-laid ~~laid~~ by the vessel;

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement; and

means for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement, the force monitoring means being associated with respective sets of guide rollers for monitoring the forces applied to the pipeline by the respective guide rollers, and being spaced apart along the path of the pipeline with the associated sets of guide rollers.

31. (Previously Presented) A vessel according to claim 30, in which three or more sets of guide rollers and associated force monitoring means are positioned along the path of the pipeline below sea level.

32. (Previously Presented) A vessel according to claim 30, in which five or more sets of guide rollers and associated force monitoring means are positioned along the path of the pipeline below sea level.

33. (Previously Presented) A vessel according to claim 30, in which the sets of rollers and associated force monitoring means are spaced apart substantially evenly along the path of the pipeline.

34. (Currently Amended) A pipe-laying vessel for J-laying a pipe, the vessel comprising:

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being J-laid ~~laid~~ by the vessel;

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, each set of guide rollers being arranged to substantially surround the pipeline, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement; and

means for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement, the force monitoring means being associated with respective sets of guide rollers for monitoring the forces applied to the pipeline by the respective guide rollers.

35. (Currently Amended) A pipe-laying vessel for J-laying a pipe, the vessel comprising:

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being J-laid ~~laid~~ by the vessel;

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement;

means for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement;

piston and cylinder arrangements for operating the guide rollers, and

a control station for receiving signals from the force monitoring means, the control station providing signals for the operation of the piston and cylinder arrangements for operating the guide rollers.

36. (Previously Presented) A method according to claim 22, in which the operation of the vessel is adjusted in dependence upon the monitoring.

37. (Previously Presented) A method according to claim 22, in which the direction or speed of travel of the vessel is adjusted in dependence upon the monitoring.

38. (Previously Presented) A method according to claim 22, in which the pipe laying operation is adjusted in dependence upon the monitoring.

39. (Previously Presented) A method according to claim 23, in which the operation of the vessel is adjusted in dependence upon the monitoring.

40. (Previously Presented) A method according to claim 23, in which the direction or speed of travel of the vessel is adjusted in dependence upon the monitoring.

41. (Previously Presented) A method according to claim 30, in which the pipe laying operation is adjusted in dependence upon the monitoring.

42. (Currently Amended) A method of J-laying ~~laying~~ a pipeline from a vessel, comprising:

lowering the pipeline down an upwardly extending tower assembly of the vessel and then through a lower guide arrangement, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the pipeline, the pipeline undergoing some bending to a shallower angle of inclination as it passes through the lower guide arrangement; and

monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement at each set of rollers of the lower guide arrangement.

43. (Currently Amended) A method of J-laying ~~laying~~ a pipeline from a vessel, comprising:

lowering the pipeline down an upwardly extending tower assembly of the vessel and then through a lower guide arrangement, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the

pipeline and defining the lateral limits of the pipeline, each set of guide rollers being arranged to substantially surround the pipeline, the pipeline undergoing some bending to a shallower angle of inclination as it passes through the lower guide arrangement; and

monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement at each set of rollers of the lower guide arrangement.

44. (Currently Amended) A pipe-laying vessel for J-laying a pipe, the vessel comprising:

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being J-laid ~~laid~~ by the vessel;

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement;

piston and cylinder arrangements for operating the guide rollers, and

at least one load cell for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement; and

a control station for receiving signals from the at least one load cell, the control station providing signals for the operation of the piston and cylinder arrangements for operating the guide rollers.

45. (Currently Amended) A pipe-laying vessel for J-laying a pipe, the vessel comprising:

an upwardly extending tower assembly defining a path down which a pipe of a pipeline passes as the pipeline is being laid in a J-laying process by the vessel; and

a lower guide arrangement for guiding the pipeline after it has passed down the tower, the lower guide arrangement being substantially trumpet shape, flaring outwardly in the direction of travel of the pipeline during laying, the angle of flare increasing in the direction of travel of the pipeline during laying, and the lower guide arrangement including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the path, the guide rollers being located such that they allow some bending of the pipeline to a shallower angle of inclination as it passes through the lower guide arrangement; and

means for monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement.

46. (Currently Amended) A method of J-laying ~~laying~~ a pipeline from a vessel, comprising:

lowering the pipeline down an upwardly extending tower assembly of the vessel and then through a lower guide arrangement, the lower guide arrangement being substantially trumpet shape, flaring outwardly in the direction of travel of the pipeline during laying, the angle of flare increasing in the direction of travel of the pipeline during laying, and including a plurality of sets of guide rollers spaced apart along the path of the pipeline and defining the lateral limits of the pipeline, the

pipeline undergoing some bending to a shallower angle of inclination as it passes through the lower guide arrangement;

monitoring ~~the~~ forces applied to the pipeline by rollers of the lower guide arrangement; and

providing signals for the operation of piston and cylinder arrangements for operating the guide rollers.